# abcam

## Product datasheet

## Anti-MHC Class II antibody ab180779

★★★★★ 2 Abreviews 20 References 画像数 3

## 製品の概要

製品名 Anti-MHC Class II antibody

製品の詳細 Rabbit polyclonal to MHC Class II

由来種 Rabbit

アプリケーション 適用あり: IHC-P, WB

種交差性 交差種: Human

免疫原 Recombinant fragment corresponding to Human MHC Class II aa 30-225. Extracellular domain.

Sequence:

RATPENYLFQGRQECYAFNGTQRFLERYIYNREEFARFDSDV

GEFRAVTE LGRPAAEYWN

 ${\tt SQKDILEEKRAVPDRMCRHNYELGGPMTLQRRVQPRVN}$ 

VSPSKKGPLQHHNLLVCHVTDF YPGSIQVRWFLNGQEETAGVVSTNLI

RNGDWTFQILVMLEMTPQQGDVYTCQVEHTSLDS

PVTVEWKAQSDSAR SK

Database link: P04440

Run BLAST with
Run BLAST with

ポジティブ・コントロール WB: U-937 and THP-1 cell lysates IHC: Human lymph node and stomach tissues.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

製品の特性

特記事項

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

**バッファー** pH: 7.30

1

Preservative: 0.02% Sodium azide Constituents: 49% PBS, 50% Glycerol

精製度 Immunogen affinity purified

**ポリ/モノ** ポリクローナル

アイソタイプ lgG

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab180779の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-P		1/50 - 1/200. <b>ab171870</b> - Rabbit polyclonal lgG, is suitable for use as an isotype control with this antibody.
WB		1/500 - 1/2000. Predicted molecular weight: 29 kDa.

#### ターゲット情報

#### 機能

Binds peptides derived from antigens that access the endocytic route of antigen presenting cells (APC) and presents them on the cell surface for recognition by the CD4 T-cells. The peptide binding cleft accomodates peptides of 10-30 residues. The peptides presented by MHC class II molecules are generated mostly by degradation of proteins that access the endocytic route, where they are processed by lysosomal proteases and other hydrolases. Exogenous antigens that have been endocytosed by the APC are thus readily available for presentation via MHC II molecules, and for this reason this antigen presentation pathway is usually referred to as exogenous. As membrane proteins on their way to degradation in lysosomes as part of their normal turn-over are also contained in the endosomal/lysosomal compartments, exogenous antigens must compete with those derived from endogenous components. Autophagy is also a source of endogenous peptides, autophagosomes constitutively fuse with MHC class II loading compartments. In addition to APCs, other cells of the gastrointestinal tract, such as epithelial cells, express MHC class II molecules and CD74 and act as APCs, which is an unusual trait of the GI tract. To produce a MHC class II molecule that presents an antigen, three MHC class II molecules (heterodimers of an alpha and a beta chain) associate with a CD74 trimer in the ER to form an heterononamer. Soon after the entry of this complex into the endosomal/lysosomal system where antigen processing occurs, CD74 undergoes a sequential degradation by various proteases, including CTSS and CTSL, leaving a small fragment termed CLIP (class-II-associated invariant chain peptide). The removal of CLIP is facilitated by HLA-DM via direct binding to the alpha-beta-CLIP complex so that CLIP is released. HLA-DM stabilizes MHC class II molecules until primary high affinity antigenic peptides are bound. The MHC II molecule bound to a peptide is then transported to the cell membrane surface. In B cells, the interaction between HLA-DM and MHC class II molecules is regulated by HLA-DO. Primary dendritic cells (DCs) also to express HLA-DO. Lysosomal miroenvironment has been implicated in the regulation of antigen loading into MHC II molecules, increased acidification produces increased proteolysis and efficient peptide loading.

配列類似性

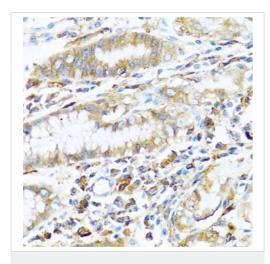
Belongs to the MHC class II family.

## 細胞内局在

Contains 1 lg-like C1-type (immunoglobulin-like) domain.

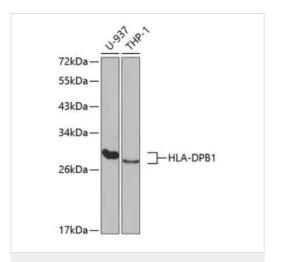
Cell membrane. Endoplasmic reticulum membrane. Golgi apparatus > trans-Golgi network membrane. Endosome membrane. Lysosome membrane. The MHC class II complex transits through a number of intracellular compartments in the endocytic pathway until it reaches the cell membrane for antigen presentation.

### 画像



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MHC Class II antibody (ab180779)

Paraffin-embedded human stomach tissue stained for MHC Class II using ab180779 at 1/100 dilution in immunohistochemical analysis.



Western blot - Anti-MHC Class II antibody (ab180779)

**All lanes :** Anti-MHC Class II antibody (ab180779) at 1/1000

dilution

Lane 1: U-937 Cell Lysate

Lane 2: THP-1 cell lysate

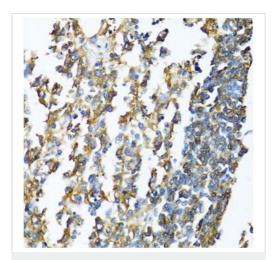
Lysates/proteins at 25 µg per lane.

**Secondary** 

All lanes: HRP Goat Anti-Rabbit lgG (H+L)

Predicted band size: 29 kDa

Blocking buffer: 3% nonfat dry milk in TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MHC Class II antibody (ab180779)

Paraffin-embedded human lymph node tissue stained for MHC Class II using ab180779 at 1/100 dilution in immunohistochemical analysis.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

## Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.co.jp/abpromise">https://www.abcam.co.jp/abpromise</a> or contact our technical team.

## Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors